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(54) Title: A DEVICE AND METHOD TO DISCRIMINATE BETWEEN SUPRA VENTRICULAR TACHYCARDIAS AND VENTRICULAR ARRHYTHMIAS

(57) Abstract: This invention provides a method to discriminate between ventricular arrhythmia and supraventricular tachycardia by detecting an earliest arriving electrical signal following antitachycardia pacing. Also disclosed is an implantable cardiac defibrillator that is capable of simultaneous atrioventricular anti-tachycardia pacing bursts and detecting an earliest arriving electrical signal. The discrimination capability reduces the incidence of inappropriate shocks from dual-chamber implantable cardiac defibrillators to near zero and provides a method to differentially diagnose supraventricular tachycardia from ventricular tachycardia.